

OPERACIONES CON FRACCIONES**Ficha 3 Nivel 1**

Opera y simplifica:

1) $\frac{2}{5} - \left(\frac{3}{4} + \frac{1}{2} \right)$

2) $\left(\frac{5}{7} - \frac{1}{2} \right) \cdot \left(\frac{4}{5} + 2 \right)$

3) $\frac{2}{3} - \frac{2}{3} \cdot \frac{1}{2} + \frac{7}{9}$

4) $\frac{3}{5} + \frac{1}{5} : \frac{3}{8} - \frac{5}{3}$

5) $\frac{1}{6} - \frac{3}{5} \cdot \left(\frac{3}{2} \right) - 1$

6) $\frac{3}{4} + \frac{1}{7} : \left(\frac{1}{6} - \frac{1}{4} \right)$

7) $\frac{2}{5} - \frac{3}{5} \cdot \frac{1}{2} + \frac{2}{3} : \frac{5}{4} - 3$

Soluciones.

$$1) \frac{2}{5} - \frac{3+2}{4} = \frac{2}{5} - \frac{5}{4} = \frac{8-25}{20} = \frac{-17}{20}$$

$$2) \left(\frac{10-7}{14} \right) \cdot \left(\frac{4+10}{5} \right) = \frac{3}{14} \cdot \frac{14}{5} = \frac{3 \cdot 14}{14 \cdot 5} = \frac{3}{5}$$

$$3) \frac{2}{3} - \frac{2 \cdot 1}{3 \cdot 2} + \frac{7}{9} = \frac{2}{3} - \frac{1}{3} + \frac{7}{9} = \frac{6-3+7}{9} = \frac{10}{9}$$

$$4) \frac{3}{5} + \frac{18}{3 \cdot 5} - \frac{5}{3} = \frac{3}{5} + \frac{8}{15} - \frac{5}{3} = \frac{9+8-25}{15} = \frac{-8}{15}$$

$$5) \frac{1}{6} - \frac{3 \cdot 3 - 2}{5 \cdot 2} = \frac{1}{6} - \frac{3}{5} \cdot \frac{1}{2} = \frac{1}{6} - \frac{3}{10} = \frac{5-9}{30} = \frac{-4}{30} = \frac{-2}{15} = -\frac{2}{15}$$

$$6) \frac{3}{4} + \frac{1}{7} : \frac{2-3}{12} = \frac{3}{4} + \frac{1}{7} : \frac{-1}{12} = \frac{3}{4} + \frac{12}{-7} = \frac{3}{4} - \frac{12}{7} = \frac{21-48}{28} = \frac{-27}{28}$$

$$7) \frac{2}{5} - \frac{3 \cdot 1}{5 \cdot 2} + \frac{2 \cdot 4}{5 \cdot 3} - 3 = \frac{2}{5} - \frac{3}{10} + \frac{8}{15} - 3 = \frac{12-9+16-90}{30} = \frac{-71}{30}$$